

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-9. (cancelled).
10. (previously presented) A method for extracting a plurality of analytes from a sample, comprising the steps of:
providing a position-addressable array of extraction probes, each probe comprising a solid support and an extraction phase;
providing an array of capillaries addressable by the array of extraction probes, the capillaries containing aliquots of the sample;
contacting the array of extraction probes with the array of capillaries such that the extraction probes are positioned within the capillaries;
separating the array of extraction probes from the array of capillaries, such as that the extraction probes are separated from the sample.
11. (original) The method of claim 10 wherein each capillary tube comprises a different sample.
12. (cancelled).
13. (previously presented) An assembly of extraction probes, each extraction probe comprising a solid support and a combinatorially derived extraction phase, wherein said extraction probes comprise a plurality of different types of extraction phases, and wherein the nature of the extraction phases are encoded by the solid supports.
- 14-15. (cancelled).

16. (previously presented) A method for extracting a plurality of analytes from a sample, comprising the steps of:
providing a plurality of extraction probes capable of adsorbing analytes, wherein each extraction probe comprises a solid support and a combinatorially-derived extraction phase, wherein said extraction probes are differentiable, wherein said extraction probes are encoded, and wherein said extraction probes are distinguished in dependence on said encoding;
distinguishing between at least two different separated extraction probes;
contacting said extraction probes with a sample suspected of comprising at least one of the analytes; and
separating said extraction probe from the sample.
17. (previously presented) The method of claim 16 wherein said separated extraction probes are distinguished by an optical method.
18. (previously presented) The method of claim 17 wherein said separated extraction probes are distinguished by a method selected from the group consisting of absorbance, fluorescence, Raman, hyperRaman, Rayleigh scattering, hyperRayleigh scattering, CARS, sum frequency generation, degenerate four wave mixing, forward light scattering, back scattering, and angular light scattering.
19. (previously presented) The method of claim 16 wherein said separated extraction probes are distinguished by a method selected from the group consisting of near field scanning optical microscopy, atomic force microscopy, scanning tunneling microscopy, chemical force microscopy, lateral force microscopy, transmission electron microscopy, scanning electron microscopy, field emission scanning electron microscopy, electrical methods, mechanical methods, magnetic detection methods, and SQUID.

20-32. (cancelled).

33. (previously presented) A method for extracting a plurality of analytes from a sample, comprising the steps of:
providing a plurality of extraction probes capable of adsorbing analytes, wherein each extraction probe comprises a solid support and a combinatorially-derived extraction phase, and wherein at least one of said extraction phases comprises a self-assembled monolayer;
contacting said extraction probes with a sample suspected of comprising at least one of the analytes; and
separating said extraction probe from the sample.

34-35. (cancelled).

36. (previously presented) A method for extracting a plurality of analytes from a sample, comprising the steps of:
providing a plurality of extraction probes capable of adsorbing analytes, wherein each extraction probe comprises a solid support and a combinatorially-derived extraction phase, and wherein said extraction phases are selected from a combinatorial library;
contacting said extraction probes with a sample suspected of comprising at least one of the analytes; and
separating said extraction probe from the sample.

37-51. (cancelled).

52. (previously presented) An assembly of extraction probes, each extraction probe comprising a solid support and a combinatorially derived extraction phase, wherein said extraction probes comprise a plurality of different types of extraction phases, and wherein at least one of said extraction phases is a self-assembled monolayer.

53-58. (cancelled).

59. (previously presented) A method for extracting a plurality of analytes from a sample, comprising:
providing a position-addressable array of extraction probes, each comprising a fiber and an extraction phase, wherein each extraction probe is capable of adsorbing an analyte;
contacting said array of extraction probes with sample aliquots suspected of comprising at least one of said analytes; and
separating said array of extraction probes from said sample aliquots.
60. (previously presented) The method of claim 59 wherein each extraction probe comprises a different extraction phase.
61. (previously presented) The method of claim 59 wherein each sample aliquot is different.
62. (previously presented) The method of claim 59 wherein each fiber has a diameter of less than 100 microns.
63. (previously presented) The method of claim 62 wherein each fiber has a diameter of less than 1 micron.
64. (cancelled)
65. (cancelled)
66. (currently amended) The method of claim 65 A method for extracting a plurality of analytes from a sample, comprising the steps of:
providing a plurality of extraction probes capable of adsorbing analytes, wherein each extraction probe comprises a freestanding particle having a composition that varies along its length and an extraction phase;

contacting said extraction probes with a sample suspected of comprising at least one of the
analytes, wherein the sample and the freestanding particle are in solution and the
freestanding particle is not bound to, incorporated in, or part of a macrostructure;
allowing the particles and the sample to exist in solution; and
separating said extraction probes from the sample,
wherein said extraction probes are differentiable, and wherein the method further
comprises distinguishing between at least two different separated extraction probes,
and
wherein said extraction probes are encoded, and wherein said separated extraction
probes are distinguished in dependence on said encoding.

67. (cancelled)

68. (cancelled)